FACULTY OF ENGINEERING
B.E. 4/4 (ECE) I Sem. (Main) Examination, December 2010
INDUSTRIAL ADMINISTRATION AND FINANCIAL MANAGEMENT

Time : 3 Hours]   [Max. Marks: 75

Note : Answer *all* questions from Part – *A.* Answer *five* questions from Part – *B.*

PART – A   (25 Marks)

1. List the types of business organisations found in vogue.   2

2. State the principles of plant layout.   2

3. State the criteria for selection of a 'New Job' under 'Select' of method study.   3

4. Define any four types of Allowances.   4

5. What are Warning limits, Action limits, Future limits, Type-I and Type-II errors in control charts ?   4

6. What are quality circles ?   2

7. List the assumptions of LPP.   2

8. Distinguish between 'Activity' and 'Event'.   2

9. How Prime cost differs from Factory cost ?   2

10. What is the difference between NPV and IRR.   2

PART – B   (50 Marks)

11. a) List the factors which affect plant location. State the theories of plant location. Point out any two important merits of Rural location over City location   (1.5+1+2)

    b) Compare and contrast process layout with product layout on

    acceptable grounds.   5.5

12. Explain any 4 important main functions and a subsiadiary functions of management. (4×2+2=10

13. a) Record the sequences involved in manufacturing an 'Eccentric' drive from raw material using FPC.

b) Distinguish between OPC and FPC.

14. a) Explain the concept of 'Job Evaluation'. How it helps in fixing wage for a job under consideration. 3.

b) Why CPM is called deterministic model and PERT as probabilistic model, with respect to CPM and PERT what do you know about the following : 6.

   i) Dummy activity

   ii) Critical path

   iii) Standard time

   iv) Beta-Distribution

   v) Forward vs Backward pass.

15. a) i) Give an example of a LPP with unbounded solution. What are 'Non-Negative' and 'Redundant' constraints in LPP. 3

   ii) State the basis on which control charts are constructed . What is upper engineering limit ? 1.5

b) i) Define Inventory. Classify inventories. Define EOQ. How trade off is achieved between ordering cost and carrying cost ? 3.5

   ii) How Centarlised purchase differs from Decentralised purchase ? Give an example. 2

16. a) i) Distinguish 'Direct cost' from 'Indirect cost'. With respect to a bolt manufacturing identify any two Direct and Indirect costs. 3

   ii) State any two assumptions of BEA. Calculate Sales, Break-Even sales, Fixed cost and Profit if margin of safety Rs. 10,000 representing 40% of sales and 50% is P/V ratio. 7

17. A company has to choose one of the following two mutually exclusive projects.
Investment required for each project is Rs. 15,000/-. Both the projects have
to be depreciated on Starightline basis. The tax rate is 50%. **10**

| Year | Profit before depreciation | |
| | Project A | Project B |
	(Amount Rs.)	
1	4,200	4,200
2	4,800	4,500
3	7,000	4,000
4	7,000	5,000
5	2,000	10,000

Calculate Pay-Back period.